

Supplementary Figure 5

Comparison of different neuron segmentation and calcium dynamic extraction approaches on s-TeFo imaging data.

ROI maps (left) and activity heat maps (right) for data analysis using PCA/ICA in (a), non-negative matrix factorization (NMF) in (b), and standard-deviation projection in (c). (d) Direct comparison of NMF vs. PCA/ICA analysis. Overlay of example activity traces extracted with PCA/ICA and NMF respectively. (e) Correlation coefficient matrix (left) and correlation coefficient histogram (right) of all neurons detected by both methods. On average the correlations are high (R=0.90±0.04). Comparison was done on data set shown in Figure 2c.